

UNITED STATES DISTRICT COURT
DISTRICT OF MASSACHUSETTS

_____)	
BOSE CORPORATION,)	
)	
Plaintiff,)	
)	
v.)	CIVIL ACTION
)	NO. 09-11439-WGY
)	
SDI TECHNOLOGIES, INC.,)	
IMATION CORP.,)	
MEMOREX PRODUCTS, INC.,)	
3XM CONSULTING, LLC, and)	
DPI, INC.,)	
)	
Defendants.)	
_____)	

MEMORANDUM OF DECISION
CONCERNING PATENT CLAIM CONSTRUCTION

YOUNG, D.J.

December 12, 2011

I. INTRODUCTION

Bose Corporation ("Bose") commenced this action against SDI Technologies, Inc. ("SDI"), Imation Corporation ("Imation"), Memorex Products, Inc. ("Memorex"), 3XM Consulting, LLC ("3XM"), and DPI, Inc. ("DPI"), for allegedly infringing its U.S. Patent No. 7,277,765 (the "'765 Patent"), titled Interactive Sound Reproducing. Claims 1-3, 13, 16-25, 33, 35, and 37-42 of the patent are currently at issue.

The '765 Patent, issued on October 2, 2007, discloses a system for playing digital music from an audio source device. The audio sources include a computer CD player, digitally encoded computer files stored on the computer, and a computer network connected to the computer. See '765 Patent, Abstract. The patent initially concerned Bose's Wave/PC product. In 2004, Bose launched its SoundDock products, which currently practice the patent. The SoundDock is similar to the Wave/PC, except that where the Wave/PC is designed to work with a personal computer, the SoundDock is designed to work with a smaller, handheld computer, such as the popular iPod and the iPhone.

II. ANALYSIS

A. Claim Construction Principles

Claim construction is an issue of law for the Court. Markman v. Westview Instruments, Inc., 52 F.3d 967, 970-71 (Fed. Cir. 1995) (en banc), aff'd, 517 U.S. 370 (1996). In construing the claims, this Court generally gives the words of the claims their ordinary and customary meaning in the art at the time of the invention. Phillips v. AWH Corp., 415 F.3d 1303, 1312-13 (Fed. Cir. 2005) (en banc).

Claims do not stand alone, they must be "read in view of the specification, of which they are a part." Id. at 1315 (quoting Markman, 52 F.3d at 979). "[T]he specification is always highly

relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term." Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed. Cir. 1996).

In addition to the specification, the prosecution history can also supply intrinsic evidence. Phillips, 415 F.3d at 1317. Prosecution history, like the specification, "provides evidence of how the [U.S. Patent and Trademark Office] and the inventor understood the patent." Id. It also demonstrates "whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be." Id.

Finally, extrinsic evidence can also be useful, as it "can shed useful light on the relevant art." Id. Such evidence is, however, less reliable, and "is unlikely to result in a reliable interpretation of patent claim scope unless considered in the context of the intrinsic evidence." Id. at 1319. In fact, "extrinsic evidence in general, and expert testimony in particular, may be used only to help the court come to the proper understanding of the claims; it may not be used to vary or contradict the claim language." Vitronics, 90 F.3d at 1584.

B. Disputed Terms

The parties originally requested that this Court construe a long list of terms found within the '765 Patent.¹ Once again this Court must point out that its duty (and power) to construe claim terms is limited by the "case or controversy" clause of the Constitution, U.S. Const. art. III, § 2, cl. 1, to those few terms which make a definitive difference to the claims and defenses of this lawsuit. Where, as here, this Court holds the Markman hearing without reference to the accused device and before it considers the inevitable motions for summary judgment, see Amgen, Inc. v. Hoechst Marion Roussel, Inc., 126 F. Supp. 2d 69, 80-81 (D. Mass. 2001) (explaining the reasons for this Court's practice), it behooves the parties to approach the hearing with a sniper rifle, not a blunderbuss. See D. Mass. L.R. 16.6 App. (B)(4)(d) ("The Court suggests that, ordinarily, no more than ten (10) terms per patent be identified as requiring construction."); accord N.D. Cal. Patent L.R. 4-1(b); D. Idaho Patent L.R. 4.1(b); N.D. Ill. LPR 4.1(b). See generally Travis M. Jensen & Matthew Paik, Patent Local Rules - A Summary & Comparison, PLI's 6th Annual Patent Law Inst. (2012), for an excellent overview of those districts which have adopted local rules for handling patent cases.

¹ 3XM did not submit any claim construction briefs or propose any constructions for the claim terms.

After carefully considering the parties' arguments made in their briefs and during the November 14, 2011, Markman hearing, this Court deems it necessary and prudent to limit its constructions to a more restricted number of disputed terms. The Court's constructions are as follows.

1. "Interface" Terms

The term "interface" appears, either explicitly or by reference, in every claim of the '765 Patent. "Interface" appears in claims 1-24, "interface unit" appears in claims 25-34, "interface device" appears in claims 35-36, and "interface module" appears in claims 37-38.

Bose contends that "interface" simply means "a connection," and that "interface unit," "interface device," and "interface module" similarly mean "a connection." SDI, Imation, Memorex, and DPI propose that "interface" means "circuitry that converts a digital audio signal from an audio source to an analog audio signal and transmits digital control commands." As for the other "interface" terms - "interface unit," "interface module," and "interface device," they propose that each term means "a discrete structure that includes the interface."

a. "Interface"

This Court agrees with SDI, Imation, Memorex, and DPI, and construes "interface" as "circuitry that converts a digital audio signal from an audio source to an analog audio signal and transmits digital control commands." There is ample support for this construction.

i. The Specification

The meaning of "interface" is not apparent from the context in which it is used in the claims. The specification, which "is always highly relevant to the claim construction analysis," Vitronics, 90 F.3d at 1582, describes two distinct embodiments of the present invention. The first embodiment, seen in Figure 1, includes a sound card 33 (within the computer system 20) that is connected to radio audio signal processing circuitry 14 (of the sound reproduction device 10, i.e., the speaker), by the stereo jack 48 through analog input terminal 49. '765 Patent, col. 3, ll. 59-61. The second embodiment in Figure 2 is the same as that in Figure 1, except that the "[s]ound card 33 . . . is not needed in this configuration" and the "[s]tereo jack 48 and the audio system control connector 50 of FIG. 1 are replaced by a bus interface connector 52, which connects to an interface unit 54." Id. at col. 3, l. 67 - col. 4, l. 4.

In other words, of the two embodiments in the specification, the first embodiment (Figure 1) has no "interface" to couple the computer to the speaker, while the second embodiment (Figure 2) is similar, except that a "bus interface connector" and an "interface unit" now couple the computer to the speaker. This is inconsistent with Bose's contention that "interface" is merely "a connection," as both embodiments have "a connection," but "interface" only appears in the second embodiment. Furthermore, the plain language in the specification also indicates that the "bus interface connector" connects the interface unit 54 to the computer. Id. at col. 4, ll. 1-4. This suggests that the "interface" connects to the computer through a separate "connector," and undermines Bose's assertion that the "interface" is the "connector."

Figure 3, along with Figures 10A through 10F, suggests that the "interface" is much more complex than simply "a connection."² In fact, Figure 3, along with its corresponding description in the specification, demonstrates that the "interface" is a

² Figure 3 shows the "interface unit" in more detail. As shown, the interface unit comprises a logic circuitry 58 and a D/A converter 60. See Figure 3; '765 Patent col. 4, ll. 15-30. In operation, the logic circuitry transmits audio information signals to the D/A converter, which "converts the digital signal to an analog audio signal." Id. at col. 4, ll. 37-40. In the particular embodiment shown in Figure 3, the interface unit also includes a second analog line 68 connecting a second analog terminal 66 and an A/D converter 70. Id. at col. 4, ll. 27-30. In addition, six electronic circuit diagrams, Figures 10A - 10F, provide a detailed overview of the interface unit.

circuitry that converts digital audio signals to analog audio signals, and transmits these audio signals and the control signals. See id. at col. 4, ll. 31-53 (describing the interface unit's operation).

Bose contends that this proposed construction from SDI, Imation, Memorex, and DPI impermissibly excludes the embodiment depicted and described in Figure 1. Generally, "there is a strong presumption against a claim construction that excludes a disclosed embodiment." In re Katz Interactive Call Processing Patent Litig., 639 F.3d 1303, 1324 (Fed. Cir. 2011); see also C.R. Bard, Inc. v. United States Surgical Corp., 388 F.3d 858, 865 (Fed. Cir. 2004) ("[A] construction that excludes a preferred embodiment 'is rarely, if ever, correct.'" (quoting Vitronics, 90 F.3d at 1583)).

Nonetheless, "a claim need not cover all embodiments." Intamin Ltd. v. Magnetar Techs., Corp., 483 F.3d 1328, 1337 (Fed. Cir. 2007); see also TIP Sys., LLC v. Phillips & Brooks/Gladwin, Inc., 529 F.3d 1364, 1373 (Fed. Cir. 2008) (citing Federal Circuit cases supporting the conclusion that "[o]ur precedent is replete with examples of subject matter that is included in the specification, but is not claimed"). As discussed above, the embodiment disclosed in Figure 2 removed the sound card, and replaced it with an "interface." Therefore, it is the claims themselves, not their construction, that exclude an embodiment,

and direct the reader to the embodiment in Figure 2 rather than the one in Figure 1.

ii. Prosecution History

Bose, in its original application, included in its original claim 1 "a connector for connecting said sound reproduction device with a computer" See Original Patent Application 28, Doc. No. 166-2. Original claim 2, a dependent claim, included a limitation: "an interface device for connecting said computer and said connector, said interface device comprising a digital to analog converter." Id. (emphasis added). Furthermore, following an Office Action, Bose incorporated this "interface" limitation into amended independent claim 80, which eventually became claim 1 of the '765 Patent. See Office Action Reply 3, Doc. No. 166-7. Specifically, Bose communicated to the PTO that

Claim 80 also now requires 'a remote control configured to produce at least a first control signal that controls an operation of the audio source device, wherein the first control signal is received by the control circuitry and transmitted to the audio source device via the interface.' These limitations are not disclosed or suggested in Contois.³

Id. at 10-11 (emphasis added). Original claims 1 and 2, along with amended claim 80, suggest that the "interface" comprises a

³ Contois, a cited prior art, refers to U.S. Patent No. 5,864,868, titled Computer Control System and User Interface for Media Playing Devices.

"digital to analog converter," and that it transmits control signals to the audio source device. The original, now cancelled claims 1 and 2, which would have covered the embodiment in Figure 1, also explain why the current claims no longer cover that embodiment. See PSN Ill., LLC v. Ivoclar Vivadent, Inc., 525 F.3d 1159, 1166 (Fed. Cir. 2007) ("[C]ancelled claims may provide 'probative evidence' that an embodiment is not within the scope of an asserted claim.").

Bose correctly states, in its briefs and during the Markman hearing, that disavowals in the prosecution history must be deliberate, unambiguous, and explicit. See Sky Techs. LLC v. Ariba, Inc., 491 F. Supp. 2d 154, 157 (D. Mass. 2007). Its statements regarding "interface," however, do not constitute a disavowal. Bose did not narrow the scope of "interface;" rather, they added and defined the term "interface" in their Office Action Reply. Meanwhile, "a patentee's statements during prosecution, whether relied on by the examiner or not, are relevant to claim interpretation." Microsoft Corp. v. Multi-Tech Sys., Inc., 357 F.3d 1340, 1350 (Fed. Cir. 2004); see also E.I. du Pont de Nemours & Co. v. Phillips Petrol. Co., 849 F.2d 1430, 1438 (Fed. Cir. 1988) ("Regardless of the examiner's motives, arguments made during prosecution shed light on what the applicant meant by its various terms."). Bose's statements regarding the "interface" during prosecution are therefore

relevant, and they suggest that "interface" is not simply "a connection" as Bose now proposes.

iii. Extrinsic Evidence

Finally, Bose provides definitions from the IEEE Standard Dictionary of Electrical and Electronics Terms, and the Modern Dictionary of Electronics. Doc. Nos. 164-3, 164-4. Bose also provides, and relies heavily on, Dr. Beckmann's declarations.⁴ Doc. Nos. 165, 173.

As an initial matter, this Court must "view[] extrinsic evidence in general as less reliable than the patent and its prosecution history in determining how to read claim terms." Phillips, 415 F.3d at 1318. In addition, "a court should discount any expert testimony that is clearly at odds with . . . the written record of the patent." Id. (internal quotation omitted). This Court will therefore not rely heavily on the Beckmann declarations. Furthermore, contrary to Bose's contention, these dictionaries' definitions of "interface" do not unequivocally affirm that it is simply "a connection."⁵

⁴ Dr. Paul Beckmann is a named inventor of the '765 Patent.

⁵ In fact, the dictionaries suggest that an "interface" can be "[a] concept involving the specification of the interconnection between two equipments or systems . . . [that] includes the type, quantity, and function of the interconnection circuits and the type and form of signals to be interchanged by these circuits," Doc. No. 164-3 at 541; "[a] circuit that controls the flow and format of data between a computer a

In light of the claim language, the specification, and the prosecution history, this Court construes "interface" as "circuitry that converts a digital audio signal from an audio source to an analog audio signal and transmits digital control commands."

b. "Interface Unit," "Interface Device," and "Interface Module"

In light of the claim language and the specification, this Court construes each of the terms "interface unit," "interface device," and "interface module" as "a structure that includes the interface."

Bose contends that these terms all mean "a connection," thus suggesting that they have the same meaning as "interface." Different terms, however, are presumed to have different meanings. See Forest Labs., Inc. v. Abbott Labs., 239 F.3d 1305, 1310 (Fed. Cir. 2001) ("Where claims use different terms, those differences are presumed to reflect a difference in the scope of the claims."). Under this claim construction principle, these terms, while containing "interface," cannot have the same meaning as "interface" itself.

terminal or other peripheral," Doc. No. 164-4 at 385; or a "common boundary" that involves "code format, speed, or other changes as required." Id.

Claims also "must be read in view of the specification, of which they are a part." Phillips, 415 F.3d at 1315. "Interface unit" and "interface module" are used interchangeably in the specification. See '765 Patent, col. 4, l. 60 - col. 5, l. 13 ("One alternative is to implement interface unit 54 as a module A second alternative is to implement interface unit 54 as an intermediate, separate unit A third alternative is to implement interface unit 54 as a module, such as circuit board in the sound reproduction device 10."). The term "interface device" only appears in claims 35 and 36. These terms' usage in the specification suggest that they refer to three similar, yet different structures with different implementation schemes, consistent with this Court's construction.

2. "A Display for Displaying . . ."

The "a display for displaying a user interface . . ." claim phrase appears in independent claims 1, 35, and 37, which define "display" with respect to its capabilities. This Court construes this term as "a display capable of displaying . . ."

The words of a claim "are generally given their ordinary and customary meaning." Vitronics, 90 F.3d at 1582. "In some cases, the ordinary meaning of claim language as understood by a person of skill in the art may be readily apparent even to lay judges, and claim construction in such cases involves little more than

the application of the widely accepted meaning of commonly understood words." Phillips, 415 F.3d at 1314. This is such a case. The specific word at issue here is "for," which the Merriam-Webster Dictionary defines as "a function word to indicate suitability or fitness." This definition is also proper in the context of the claim language, this Court therefore does not need further to consult other intrinsic or extrinsic evidence. See Brown v. 3M, 265 F.3d 1349, 1352 (Fed. Cir. 2001) ("[Terms that] are not technical terms of art . . . do not require elaborate interpretation.").

SDI argues that the phrase "display for displaying" is a means-plus-function limitation under 35 U.S.C. § 112 ¶ 6.⁶ This is incorrect, as a display constitutes a structural element. See Paragon Solutions, LLC v. Timex Corp., 566 F.3d 1075, 1086-87 (Fed. Cir. 2009) (holding that "display unit" is not a means-plus-function limitation); Optimal Rec. Solutions v. Leading Edge Techs, Inc., 6 F. App'x 873, 877-78 (Fed. Cir. 2001) (holding that "a display" is "sufficient structure for accomplishing the functions recited in the pertinent claim limitations.)). Furthermore, the phrase at issue here does not include the term "means," thus triggering a presumption that the claim limitation here is not subject to Section 112, paragraph 6. CCS Fitness,

⁶ Under 35 U.S.C. § 112, ¶6, patent applicants may claim an element of a combination based on its functionality, without reciting any structures for performing a particular function.

Inc. v. Brunswick Corp., 288 F.3d 1359, 1369 (Fed. Cir. 2002).

This presumption has not been overcome here.

In Optimal Recreation, the Federal Circuit construed the term "display" as "a device capable of visually representing information." 6 F. App'x at 878 (emphasis added). Similarly, this Court construes the phrase "a display for displaying" as "a display capable of displaying."

3. "Metadata"

The term "metadata" appears in every independent claim. This Court construes "metadata" as "data containing identifying characteristics."

As used in the claims, "metadata" "characterizes the music file." See, e.g., '765 Patent, claim 1. The term is used similarly in the specification. See id. at col. 7, ll. 26-28 ("[The assemblage] includes recorded units with common identifying characteristics, sometimes referred to as common 'metadata' values."). The specification also explains that "[m]etadata values may include the artist, the composer, the type of music, and others." Id. at col. 7, ll. 30-32. The term's usage in the claims and the specification is consistent with this Court's construction.

Bose proposes to construe "metadata" as "information that describes the content of other data." Bose's construction

improperly imports an unsupported limitation into the term, by requiring the metadata to describe the "content" of other data. Examples of metadata provided in the specification include the artist, composer, and the type of music, none of which relates to the content of the music files. Meanwhile, SDI, Imation, Memorex, and DPI propose to construe this term as "information that characterizes the music file." This construction is redundant; the relevant claims already require "metadata" to "characterize[] the music file" or otherwise be "associated with" the music file. See '765 Patent claims 1, 25.

4. "A Plurality of Music Files, Each Music File Including . . ."

The claim phrase "a plurality of music files, each music file including at least a first and second type of metadata that characterizes the music file" is in every independent claim. Three terms, "a plurality," "music file," and "including," are in dispute here.

a. "A Plurality"

"A plurality" means "at least two." Bilstad v. Wakalopoulos, 386 F.3d 1116, 1121-22 (Fed. Cir. 2004). This construction is also consistent with the term's ordinary meaning. Id. at 1122. Bose proposes to construe "a plurality" as "a group of at least two," but there is no requirement that "at least two" must be in

a "group" as Bose proposes. Bose does not rely on any intrinsic or extrinsic evidence to support its proposed construction, as there is none. "A plurality" means "at least two."

b. "Music File"

The specification states that "recorded units and assemblages of recorded units are referred to as 'music files' even though the recorded units are not necessarily recordings of music." '765 Patent, col. 7, ll. 10-12. Accordingly, this Court construes "music file" as "a recorded unit of sound."

c. "Including"

As discussed above, terms that "are not technical terms of art . . . do not require elaborate interpretation." Brown, 265 F.3d at 1352. "Including" is another such term; this Court will therefore accord it its ordinary and customary meaning.

The parties, however, dispute whether the music files, which include "at least a first and second type of metadata," must be stored in the same location as the metadata. Bose proposes to construe "including" as "contains within it," which, according to SDI, Imation, Memorex, and DPI, infers that the metadata and the music file are stored in the same physical location. The specification, however, is silent on whether metadata is stored within the "file header information," whose physical location is

also unclear. Bose argues, unpersuasively, that because the claims used the term "including" rather than a more general term such as "associated with," metadata must be contained within the music file. This argument is not supported by any intrinsic or extrinsic evidence. In fact, the claims do use the more general term "associated with." See, e.g., '765 Patent, claim 25 ("metadata associated with the new music file[.]") (emphasis added). While declining to construe "including," this Court does hold that this term does not suggest that the metadata must be stored in the same physical location as the music files.

5. "Signal" and "Command"

"Signal" appears in independent claim 1, and "command" appears in independent claims 25, 35, and 37. SDI, Imation, Memorex, and DPI propose to construe "signal" as "a series of pulses or waves used to transmit information," and "command" as "the desired action of the sound reproduction or audio source device." There is no need to construe these terms, and this Court accords them their ordinary and customary meaning.

a. "Signal"

There is no intrinsic evidence supporting SDI, Imation, Memorex, and DPI's proposed construction for "signal." The specification uses the term "signal" repeatedly, but it only

describes the paths for and the types of these signals. See, e.g., '765 Patent col. 4, ll. 31-54 (describing the path of control signals between networked audio system and computer); id. at col. 9, l. 62 - col. 11, l. 3 (explaining in detail the various types of the signals). Nowhere does the usage of this term compel construing it as "a series of pulses or waves used to transmit information." Furthermore, SDI, Imation, Memorex, and DPI's proposed construction is unnecessarily confusing. See Stanacard, LLC v. Rebtel Networks, AB, 680 F. Supp. 2d 483, 493 (S.D.N.Y. 2010) (refusing to adopt a proposed construction that "serves only to introduce additional terms into the claim and would result in confusion for the jury").

b. "Command"

As used in the claims, a "command" "controls a function of the sound reproduction device," '765 Patent, claim 25, "controls a function of the music storage device," id., and "controls a function of the audio source device." Id. at claims 35, 37. SDI, Imation, Memorex, and DPI's construction, "the desired action of the sound reproduction or audio source device," improperly narrows and is incompatible with the claim language, as it leaves out the "music storage device."

"Command" is a simple and widely used term, and there is no indication here that the inventors intended to use the term

differently from its commonly understood meaning among persons of skill in the art. See American Patent Dev., Corp. v. Movielink, LLC, 604 F. Supp. 2d 704, 716 (D. Del. 2009)(refusing to adopt a construction that was "merely a verbose paraphrasing of claim language that otherwise offers little to assist one of skill in the art in understanding the claims").

6. "Automatically Update"

The phrase "cause the processor to detect an addition of a new music file . . . and in response to detection of a new music file, automatically update the first and second set of groups . . ." appears in dependent claim 3 and independent claim 25. The parties dispute whether "automatically" means that no user action is required. This term does not need any construction, and this Court accords it its ordinary and customary meaning.

Bose argues that the specification supports its proposed construction, that "automatically update" means "the updating occurs without the user taking any action." The specification, however, discloses that the automatic updating process occurs after either a new music file is added, or "the assemblage is requested." '765 Patent, col. 7, ll. 44-52. Both actions require a user action. Bose's proposed construction consequently would be too broad, as it suggests that the entire updating process

requires no user action, contrary to the claim language and the specificati

7. "Audio Source Device," "Music Storage Device," and "Computer"

Four of the parties, Bose, Imation, Memorex, and DPI, agree that these terms do not need construction. SDI, however, urges this Court to construe these terms narrowly, in such a way that they can refer only to a conventional personal computer. This Court disagrees, and instead accords them their ordinary and customary meaning.

The specification, SDI argues, limits "computer" to a conventional personal computer by indicating that it includes a computer CD player, be a "computer system," or be connected to a "computer network." See '765 Patent, col. 1, l. 24 - col. 2, l. 23. SDI, however, overlooks a basic claim construction principle by attempting to limit the claims to one disclosed embodiment. See Phillips, 415 F.3d at 1323. Furthermore, the specification also states that the "[c]omputer system 20 may be a conventional multimedia personal computer [in one implementation]." '765 Patent, col. 4, ll. 58-59 (emphasis added). SDI next argues that the language in claims 1 and 25 limit these terms to personal computers. Claims 14 and 26, however, state that the "computer" and the "music storage device," respectively, each "comprises a personal computer." '765 Patent, claims 14, 26. Under the doctrine of claim differentiation, these claims demonstrate that

the "computer" and the "music storage device" are not limited to a personal computer. See Liebel-Flarsheim Co. v. Medrad, Inc., 358 F.3d 898, 910 (Fed. Cir. 2004) ("[T]he presence of a dependent claim that adds a particular limitation raises a presumption that the limitation in question is not found in the independent claim."); see also Phillips, 415 F.3d at 1314 ("Differences among claims can also be a useful guide in understanding the meaning of particular claim terms.").

8. "An Analog Representations of the Respective Music Files"

Finally, Bose proposes to construe the phrase "an analog representations of the respective music files" to mean "analog audio signals corresponding to the music in the music files." Bose offers no intrinsic or extrinsic support for this construction other than Dr. Beckmann's declarations, which, as discussed above, carry very little evidentiary weight. Furthermore, this construction does not differ from the term's ordinary and customary meaning, this Court therefore declines construing this term. See WIMCO, LLC v. Lange Indus., Inc., No. 06-CV-3565, 2007 WL 4461629, at *4 (D. Minn. 2007)(providing no claim construction for a term where "any further definition or paraphrasing would serve no useful purpose").

III. CONCLUSION

For the foregoing reasons, the disputed claim terms that warrant construction are given the constructions set forth in this opinion.

IT IS SO ORDERED.

/S/ William G. Young

WILLIAM G. YOUNG
DISTRICT JUDGE